

**REMARKS**

This Amendment responds to the Office Action mailed August 9, 2005 in the above-identified application. Based on the foregoing amendments and the following comments, reconsideration and allowance of the application are respectfully requested.

Claims 24-27, 29-32, and 34-60 are pending in this application. By this amendment, claims 24, 27, 29, 30, 32, 34-37, 43, 44, and 46-60 have been amended. As a result, claims 24-27, 29-32, and 34-60 are pending for examination, with claims 24, 32, 37, 46, 53, and 54 being independent claims. No new matter has been added.

The Examiner has objected to the specification and has suggested that section headings be added. In response, the Examiner is referred to the Preliminary Amendment mailed with the application on May 21, 2001. In the referenced Preliminary Amendment, section headings were added. Accordingly, the requested change was previously made, and withdrawal of the objection to the specification is respectfully requested.

The Examiner has objected to claims 24-27, 29-32 and 34-60 because of various informalities. The changes recommended by the Examiner have been made. Accordingly, withdrawal of the objection to claims 24-27, 29-32 and 34-60 is respectfully requested.

The Examiner has rejected claims 24-27, 29-32 and 34-60 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement.

The Examiner is advised that there is no difference in meaning between the term “energy loading” and the term “energy transmit”. In order to avoid any potential confusion, the specification has been amended at page 7, line 10 to change “transmit energy” to “transmit energy or energy loading.”

Regarding the use for the energy loading or what it has to do with the modems in the network terminals, claims 24 and 32 have been amended to recite producing, in each of at least some of said modems, an energy loading  $E_k$ . Claims 37, 46, and 53 specify that the modem includes control means to produce an energy loading. Claim 54 specifies that the modems produce an energy loading  $E_k$ . Thus, the relation between the energy loading and the modems is specified in the amended claims.

Regarding the lengths of the wires, the relatively short wires are indeed less than 1000 meters long and the relatively long wires are more than 1000 meters long. The values of 300 and 1500 meters shown in Fig. 1 and described on page 6, lines 13-19 of the specification are typical values to illustrate an example, but do not represent upper and lower limits.

Based upon the above discussion and the referenced amendments, claims 24-27, 29-32 and 34-60 are in full compliance with 35 U.S.C. §112, first paragraph, and withdrawal of the rejection is respectfully requested.

The Examiner has rejected claims 24-27, 29-32 and 34-60 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 24 and 32 have been amended to specify the cooperation or connection between energy loading  $E_k$  and the modems. It is submitted that independent claims 37, 46, 53 and 54 specify the cooperation or connection between energy loading  $E_k$  and the modems. For example, claim 37 states that the second modem includes means for controlling transmission adapted to produce an energy loading  $E_k$ . Claims 46, 53 and 54 provide a similar connection between the modems and energy loading  $E_k$ .

Claim 27 has been amended to specify that the modems modulate transmitted data using discrete multitone. Claim 55 has been amended to specify that data transmitted by the modems is modulated using discrete multitone.

Claims 46, 48, 53, 54 and 56 have been amended to provide an antecedent basis for all claim language.

Based upon the above discussion, claims 24-27, 29-32 and 34-60 are in full compliance with 35 U.S.C. §112, second paragraph, and withdrawal of the rejection is respectfully requested.

No prior art having been cited, claims 24-27, 29-32 and 34-60 are in condition for allowance.

**CONCLUSION**

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

Applicant hereby requests the necessary one month extension of time. This response, including the one month extension fee, is covered by an enclosed check. Please charge any deficiency to Deposit Account No. 23/2825. If there is a additional fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,

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